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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/608,431 | 06/30/2003 | Yoshitsugu Nakatomi | 086305-0109 | 7161 |
| 22428 | 7590 | 09/08/2004 | EXAMINER | |
| FOLEY AND LARDNER SUITE 500 3000 K STREET NW WASHINGTON, DC 20007 | | | LEUNG, PHILIP H | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3742 | |

DATE MAILED: 09/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/608,431

Applicant(s)

NAKATOMI, YOSHITSUGU

Examiner

Philip H Leung

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 1-26-2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1-26-2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The title should reflect the use of induction heating.

2. In the specification, the numerous references to the claims, such as "claim 1 and claim 7" at line 3 and "claim 3 and claim 10" at line 4 and "claim 1" at line 18 of page 4; "claim 7" at line 31 of page 6, "claim 8" at line 4 of page 7 and also on pages 11 and 13-17; etc. are objectionable because "the claims" are subject to change and cancellation. Deletion of all these references is required.

3. The drawings filed 1-26-2004 are objected to by the Examiner because Figures 1-4 should be labelled "Prior Art" or "Related Art". Correction is required.

Therefore, new corrected drawings in compliance with 37 CFR 1.121(d) are required in this application. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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5. Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "said cover members" is inconsistent with the term "a covering member" recited earlier in each claim. Therefore, it is not clear if one or plural covering members are intended. Clarification and correction are required.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-8, as far as the claim are understood and proper, are rejected under 35 U.S.C. 103(a) as being unpatentable over Kato (US 5,713,069).

Kato shows "a fixing device employing an induction heating coil system 12, comprising: a heating roller 10 having an induction heating coil 12 disposed therein, a pressing roller 11 for pressing said heating roller 10, and preheating member 30 is the claimed covering member having a heat accumulating/generating member secured thereto (see Figures 1-3 and col. 3, line 28 – col. 6, line 34). Although it does not explicitly shows that the covering member is disposed so as to surround said heating roller on both ends of said heating roller and both ends of the maximum paper width. The circular arc-shaped portion 31 of the member 30 at least partially surrounds the heating roller 10, therefore it substantially meets the claimed language as it does

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not require “completely surround”. Furthermore, as it teaches that “the circular arc-shaped portion 31 is arranged to cover the fixing roller 10 as widely as possible and by setting the distance between the surface of the fixing roller 10 and itself as small as possible, the distance from the area where the induction magnetic flux generates is shortened. In addition to this, the quantity of heat of the heat generating portion can be made smaller allowing the temperature to rise faster” (col.5, lines 33-45). Therefore it can be seen that the circular arc member 31 obviously extends to the width of the paper and the heating roller in order to cover the whole paper. It is assumed that only one covering member is claimed. In regard to claims 2 and 5, the use of an insulating member to cover a heating device to reduce heating loss is routine in the art of electric heaters (see col. 7, lines 33-44 and claim 18). In regard to claims 3 and 6-8, the use of circular pipe with an opening as the shape of the covering member would have been a matter of engineering variations of the circular arc of Kato depending on the exact amount of desired heating.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

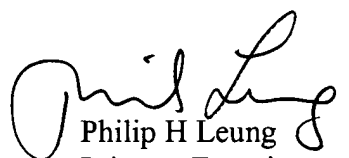
Maeda et al (US 6,687,482) and Katakabe et al (US 2004/0169036) are further cited to show induction fixing devices with various features.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip H Leung whose telephone number is (703) 308-1710.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans can be reached on (703) 305-5766. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Philip H Leung
Primary Examiner
Art Unit 3742

P.Leung/pl
9-03-2004